From: Denise St. Laurent
Sent: Sunday, April 27, 2003 9:06 PM
To: Karajeh, Fawzi
Cc: Richard Katz
Subject: Comments on Task Force draft final report

Dear Fawzi,

The Safe Water Reuse comments on the Task Force draft final report are attached.

Best regards,

Denise

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Comments on the 2002 Recycled Water Task Force Draft Final Report

As stated in the Final Report, the 2002 Recycled Water Task Force was created by AB331. Not mentioned in the final report is that AB 331 was sponsored by WateReuse, the lobbying arm for those with a financial interest in producing and selling recycled water. The Task Force membership was heavily populated by WateReuse recommendations – 2/3 of the members according to the WateReuse web site at http://www.watereuse.org.

The overall tenor of the final report reflects the industry-dominated composition of the Task Force. Public health considerations are subordinated to the requirements of the recycled water industry. The convergence of the needs of developers for ever increasing supplies of water with the attempt by the Task Force to minimize the public health regulations related to the uses of recycled water is very obvious in this report.

Recently, the Chromate Toxicity Committee report was thrown out by the California legislature because of undue industry influence. The parallels between the Chromate Toxicity Committee and the 2002 Recycled Water Task Force are, unfortunately, extremely apparent in this final report.

Safe Water Reuse is very concerned about the recommendations in Section 3.2 DHS Guidance on Cross Connection Control.

Whenever recycled water is used for irrigation, it is all too easy for landscapers or homeowners to inadvertently connect the recycled water and potable water systems, which is a cross-connection. Whereas recycled water has many beneficial uses, drinking recycled water is not one of them and that is the result of a cross-connection.

There have been 20 recycled water cross-connections that were both discovered and reported to State Health in California. These were reported at schools, parks, golf courses, businesses and private homes where recycled water is used for irrigation. This does not reflect all of the cross connections that have occurred, as many cross connections are not reported because they are difficult to detect and, when found are usually corrected without being reported. The majority of these reported cross connections were at use sites not considered to be "dual-plumbed.", a Title 22 interpretation limiting "dual plumbed" use sites to only where recycled water is used inside buildings and at residential sites. The majority of recycled water use sites such as those mentioned in the following paragraph are ignored in regulations.

One of the "impediments" the Task Force is looking to do away with is periodic cross connection testing to make sure the recycled water and potable water systems are not cross-connected. Our State Health Department Office of Drinking Water has apparently taken the position that these tests are no longer needed at our schools, hospitals, medical facilities, parks, etc., where recycled water is used for irrigation.

In Florida, a similar position was taken in the early 1990s. In 2000, the Florida Department of Environmental Protection started to require the reporting of cross-connections between recycled and potable water systems. In 2001, the first reportable year of the new requirements, 44 cross connections were reported.

The following statement from Section 3.2 has little basis in reality and the potential health and safety effects must be carefully considered.

Most of the requirements in Title 22, Article 5 (see Appendix D) apply only to dual-plumbed systems – plumbing outlets within buildings and landscape irrigation at individual residences. The requirement of greatest concern is for a test every four years to show that a cross-connection does not exist. A pressure test (alternating shutdown of the potable and recycled water systems) has been the accepted test. The cost and service disruption associated with the test is an impediment to dual-plumbed recycled water systems.

The Task Force composition, while heavily dominated by industry, included no representatives from recycled water customers. To determine if the pressure test was considered an "impediment" by those using recycled water, Safe Water Reuse sent a survey by mail to 36 recycled water customers and landscape companies in San Diego County. Thirteen completed surveys were returned by mail or fax, a 36% rate of return.

The results reflect both the positives and negatives viewed by customers actually using recycled water. Four of the thirteen results were from facilities operating 24 hours/7 days per week. Recycled water uses by our respondents included landscape irrigation, concrete mixing, field crops, golf course, toilet/urinal flushing and dust control.

Respondents ranked the primary benefits of using recycled water from 1 (Not Important) to 5 (Very Important) in the following order:

1. A beneficial use of recycled water.
2. Uninterrupted supply of water during drought.
3. Using recycled water frees potable water for other uses.
4. Reduced rates for water.
5. Reduced need for fertilizer.

One reply indicated that "I pay more!" for recycled water; and another reply stated "Doesn't apply - Not reduced" to the "Reduced rates for water statement".

Respondents ranked the negative aspects of using recycled water from 1 (Not Important) to 5 (Very Important) in the following order:

1. Water quality (salt, chlorine, etc. limiting selection of planting material).
2. Increased maintenance costs due to more frequent system repair (valves, sprinklers, etc).
3. Potential health effects.
4. Cost of regulatory oversight by County of San Diego Department of Environmental Health staff.
5. Inconvenience of cross connection (shutdown) tests.
6. Site Supervisor training requirements (County Water Authority class)
7. Inconvenience of inspections/oversight by Water Purveyor staff.
8. Restricted hours for usage.
9. Initial connection fees charged for meters.

One of the results included was "Cost of potable vs. recycled" 5+. The same respondent indicated 5+ for both Increased Maintenance Costs and Water Quality; however the results were tabulated using 5.

An opportunity to forward comments to the 2002 Recycled Water Task Force was provided and the comments are as follows:

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I am working with other large users in our area on problems associated with:

a) Debris in the system
b) High chlorine content
c) Deterioration of equipment (premature)
d) Effect of salts on the condition of all plant material

Four Seasons Resort Aviara. Recycled water used for landscape irrigation (24-hour facility)

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Low cost of water and consistency or quality are absolute musts for our operation. Currently water quality is highly variable and has too many contaminants for our usage. Chlorine and other salts are creating problems for us.

Recycled water is used to irrigate annual field crops – cut flowers and bulbs. Site information not provided.

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Most individuals would use reclaimed water:

a) *If cost significantly cheaper*
b) *If there is a potential to mix both fresh and recycled before use*
c) *General public were to know it is not drinkable but very safe. There is a stigma that it is raw sewage.*

Recycled water used for golf course irrigation. Site information not provided.

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Media and County health have very poor job handling information regarding benefits of recycled water. The two together have created hysteria over so called "potential" health effects. Recycled water has been used for many years/decades in other parts of the country without any documented cases of health issues. We should be pumping this water back into our reservoirs and reprocessing it to decrease our dependence on Colorado River which is dirtier than anything coming out of the recycle plant.

BD Biosciences Pharmingen. Recycled water is used for landscape irrigation, cooling tower, toilet and urinal flushing.

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More than adequate supplies and are currently looking for additional consumption at our location. Dust control is a better application of recycled water than using drinking water supplies.

Sycamore Landfill. Recycled water used for dust control.

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Water quality affects plant material and irrigation components in an abnormally short amount of time. Also it concerns my health.

Tierra Verde Resources. Recycled water used for landscape irrigation.

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My only concern is how the water is purified for use in concrete batches. I believe there is a lot of salt used in the process which could damage concrete over time. I am told that the reclaimed water is within certain guidelines and hope this to be true as it is used in every batch of concrete we produce.

San Diego Precast. Recycled water used for concrete mixing.

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It is interesting to note that most of the comments received were related to water quality. This is an important issue that must be resolved if we are to increase the acceptance of recycled water for non-potable uses. This issue was not addressed by the Task Force, simply because the industry-dominated composition did not include any representatives from sites where recycled water is used.

There were no comments submitted, either positive or negative, concerning the undocumented assumption by the Task Force about the cost or inconvenience of cross connection (shutdown) testing.

Safe Water Reuse is concerned about the lack of public participation in this process.

The transmission letter to Thomas Hannigan, Director, DWR states that *"In addition to input from industry and government, these recommendations benefited tremendously from the input of the public. Their input helped inform the Task Force's thinking and the report as a whole"*.

This statement should be stricken as there was very little opportunity for public involvement or input in this process. The three so-called "public" hearings were held at the May 8, 2002 Association of California Water Agencies Conference in Monterey; the October 10, 2002 California Water Policy Conference in Los Angeles; and the February 26th WateReuse Annual Conference in San Francisco. These cannot possibly be considered as venues encouraging the input of the public, and a review of the attendance lists from the Conferences confirms the lack of public participation.

A list of the issues that were created for the Task Force to address is attached, and provides further evidence of its industry domination (please see the list of WateReuse members referenced on the list).

In closing, Safe Water Reuse strongly believes that cross connection testing requirements for recycled water are NOT an impediment to the safe use of recycled water. Our position is that these requirements are critical for protecting our drinking water supply at all sites that use recycled water and potable water. We further believe that participation from the public is key to any decisions affecting their drinking water supplies.

Respectfully submitted,

Denise St. Laurent

Attachment

ISSUES PRESENTED FOR CONSIDERATION TO 2002 RECYCLED WATER TASK FORCE*

Category	Issue	References	WateReuse Member	Task Force Member
Public Perception/Education & Outreach	Determine current public perceptions and acceptance of water recycling	Norris Brandt	Yes	No
Public Perception/Education & Outreach	Provide a consistently high funding for public education programs	Minutes, 4/3/02 Meeting	NA	NA
Public Perception/Education & Outreach	Additional testing and certification to ensure the safe use of recycled water	Richard Prima	Yes	No
Public Perception/Education & Outreach	Update epidemiological studies and provide an overall current assessment of the science regarding public health and the use of recycled water	Norris Brandt	Yes	No
Public Perception/Education & Outreach	Address social equity in the distribution of recycled water	Minutes, 4/3/02 Meeting	NA	NA
Public Perception/Education & Outreach	Educate farmers and growers who are often reluctant to use recycled water as allowed in Title 22	Richard Prima/Martin Wilder/ Bob Whitley	Yes/Yes/Yes	No/No/Yes
Economic Feasibility/Grants & Loans	Provide grants for recycled water projects to make them competitive to other sources	Ann Farrell/Norris Brandt/Tim Anderson/Suja Lowenthal[1]	No/Yes/Yes/No[1]	No/No/No/No
Economic Feasibility/Grants & Loans	Provide grants for education of the public/farmers/food processors	NOT PROVIDED	NOT PROVIDED	NOT PROVIDED
Economic Feasibility/Grants & Loans	State subsidy program is lengthy and cumbersome	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Consider financial assistance for water recycling from CALFED and the State Water Project	Minutes	NA	NA
Economic Feasibility/Grants & Loans	Tax break for entities using recycled water	Suja Lowenthal[1]	No[1]	No
Economic Feasibility/Grants & Loans	Tax breaks and incentives for one entity may mean additional tax or financial burden for others	Minutes, 4/3/02 Meeting	NA	NA
Economic Feasibility/Grants & Loans	Provide mechanisms for financial support to research addressing emerging health concerns	Bob Whitley	Yes President	Yes
Economic Feasibility/Grants & Loans	Water credits to users of potable water who decide to convert to recycled water, therefore helping solve local water shortages	Bob Whitley	Yes President	Yes
Economic Feasibility/Grants & Loans	Outline costs and benefits of water recycling and provide rigorous analysis of the true costs and benefits.	Minutes, 4/3/02 Meeting	NA	NA
Economic Feasibility/Grants & Loans	Clarify the economic criteria for state funding of water recycling projects	Minutes, 4/3/02 Meeting	NA	NA
Economic Feasibility/Grants & Loans	Clarify and strengthen language in State Water Code that gives agencies more authority to impose penalties on entities that do not use recycled water	Suja Lowenthal[1]	No[1]	No

Economic Feasibility/Grants & Loans	The costs of recycling projects are often borne locally even though the benefits of water reuse often accrue statewide	Martin Zvirbulis	Yes	No
Economic Feasibility/Grants & Loans	Provide incentives for land developers to install water recycling systems	Minutes, 4/3/02 Meeting	NA	NA
Economic Feasibility/Grants & Loans	Costly repetitive Engineering reports needed for each site	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Costs related to dewatering and discharge. Must dewater to sewer, can't dewater to creeks	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Costs related to cross connection program	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Costs related to spill reporting	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Large storage facilities are expensive	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Greater support for surface storage and groundwater storage	Norris Brandt	Yes	No
Economic Feasibility/Grants & Loans	Seasonal storage facilities are needed near wastewater treatment plants to store recycled water when it is not needed	Norris Brandt/Minutes 4/3/02 Meeting	Yes/NA	No/NA
Laws and Regulations	State law regarding land use and permitting treats recycled water as wastewater facilities	Albert Hazbun	Yes	No
Laws and Regulations	Discharge of recycled water to a pond requires enough freeboard to account for a 100-year storm	Albert Hazbun, Bob Castle	Yes/Yes Legislative Co-Chair	No/Yes
Laws and Regulations	One molecule rule considers that any discharge of rainfall-induced stormwater or incidental runoff that could contain one molecule of recycled water is an illegal point discharge of wastewater that requires a point discharge NPDES permit	Bob Castle/Bob Whitley	Yes Legislative Co-Chair /Yes President	Yes/Yes
Laws and Regulations	Address the issues of laws governing duplication of service in dual distribution systems	Norris Brandt/Minutes 4/3/02 Meeting	Yes/NA	No/NA
Laws and Regulations	Consider neutral third party mediators to facilitate multiparty agreements between competing recycled water purveyors	Bob Whitley, Minutes 4/3/02 Meeting	Yes President/NA	Yes/NA
Laws and Regulations	Review of overlapping laws and regulations relevant to wholesaling and retailing of recycled water	NOT PROVIDED	NOT PROVIDED	NOT PROVIDED
Laws and Regulations	Recycled water spill is considered as sewage spill	Andy Sienkiewich/Bob Greaney/Norris Brandt/Minutes 4/3/02 Meeting	Yes/Yes/Yes/NA	No/No/No/NA
Laws and Regulations	Include in the Water Code a clear classification for types and appropriate uses for each	Norris Brandt	Yes	No

Laws and Regulations	Clean Water Act considers that wetlands (even man made ones) are waters of the state with very strict effluent limitations making it difficult to implement reuse projects for wetland restoration	Tim Anderson	Yes	No
Laws and Regulations	Non-uniformity of water recycling standards statewide	Norris Brandt	Yes	No
Laws and Regulations	Legislation should be enacted to forbid local agencies from restricting recycled water projects in any manner that goes beyond the requirements of state law and regulations	Bob Whitley/Minutes	Yes President/NA	Yes/NA
Laws and Regulations	Current water recycling criteria impose in addition to water quality certain treatment technologies and plant designs making it restrictive on use of innovative technologies	Bob Whitley	Yes President	Yes
Laws and Regulations	Clarify the definition of impairment contained in California law. Water Code Section 13540 requires DHS to determine that injection projects will not impair receiving aquifers used as drinking water supply	Bob Whitley	Yes President	Yes
Laws and Regulations	Recycled water producers may be liable for users violations	Norris Brandt	Yes	No
Laws and Regulations	Regulate water softeners locally to protect recycled water for reuse	Minutes 4/3/02 Meeting	NA	NA
Laws and Regulations	Costly repetitive Engineering reports needed for each site	Norris Brandt	Yes	No
Laws and Regulations	Use of recycled water for industry should be enforced	Minutes 4/3/02 Meeting	NA	NA
Laws and Regulations	Residential use of recycled water for landscaping	Andy Sienkiewich	Yes	No
Laws and Regulations	Investigate if the ability to charge for regulatory oversight and inspections provides a financial inducement to create regulations that have lost sight of reasonable balance between risk management and costs	Bob Whitley	Yes President	Yes
Laws and Regulations	Insufficient coordination among various recycled water regulators. Each regulatory body works independently from the others	Norris Brandt/Tim Anderson	Yes/Yes	No/No
Laws and Regulations	Centralize reviews and approvals in "one stop" approach	Norris Brandt	Yes	No
Laws and Regulations	Need for a statewide coordinated program	Norris Brandt/Tim Anderson	Yes/Yes	No/No
Environmental Issues Surrounding Use	Consider the positive environmental impacts of water recycling upstream since recycling alleviates the demand for fresh water from streams and lakes	Minutes 4/3/02 Meeting	NA	NA
Environmental Issues Surrounding Use	Consider the benefits of recycling in complying with water quality requirements for discharges into receiving waters	Ann Farrell[2]	No[2]	No
Environmental Issues Surrounding Use	Consider the negative impact of recycling on receiving waters due to reducing discharge for the purpose of reuse	Minutes 4/3/02 Meeting	NA	NA

Environmental Issues Surrounding Use	Incidental recharge of groundwater	NOT PROVIDED	NOT PROVIDED	NOT PROVIDED
Environmental Issues Surrounding Use	Incidental runoff occurring from using recycled water for beneficial use can be in violation of NPDES permits	Tim Anderson	Yes	No
Environmental Issues Surrounding Use	Address the potential of high nutrient-laden recycled water contaminating groundwater basins	Minutes 4/3/02 Meeting	NA	NA
Environmental Issues Surrounding Use	Conflicts with downstream water quality benefits in cases where discharge contributes to enhancing stream water quality such as salinity reduction	Tim Anderson	Yes	No
Environmental Issues Surrounding Use	Negative economic impact on parties who have legal right to water downstream	Daniel Gallagher	Yes	No
Environmental Issues Surrounding Use	Diversion of recycled water for reuse may have negative impact on riparian habitat downstream	Daniel Gallagher	Yes	No
Environmental Issues Surrounding Use	Anti-growth proponents may view recycled water as a supplemental source to fuel growth	Suja Lowenthal[1]	No[1]	No
Environmental Issues Surrounding Use	Large storage facilities are environmentally controversial	Tim Anderson	Yes	No
Environmental Issues Surrounding Use	Drought waiver for discharge limits (no dilution) so as not to undermine the drought-proof aspect of recycled water	Leighton Fong	Yes	No
Environmental Issues Surrounding Use	Regional brine lines for discharging highly concentrated brines	Leighton Fong	Yes	No
Pharmaceuticals, Hormones, Trace Elements, Persistent Organics	Cost effective means to remove trace elements	Tim Anderson	Yes	No
Pharmaceuticals, Hormones, Trace Elements, Persistent Organics	Does the problem of pharmaceuticals concern recycled water specifically or water sources in general, including potable water supplies	NOT PROVIDED	NOT PROVIDED	NOT PROVIDED
Pharmaceuticals, Hormones, Trace Elements, Persistent Organics	Use academic institutions for more basic and applied research on wastewater reuse	Minutes 4/3/02 Meeting	NA	NA
Pharmaceuticals, Hormones, Trace Elements, Persistent Organics	The use of Action Levels as compliance mechanisms. Even though Action Levels are health-based advisory levels issued by DHS for chemicals in drinking water that lack maximum contaminant levels, they have become de facto regulations and significant barrier	Bob Whitley	Yes President	Yes
Plumbing Code Issues	Impossible to retrofit existing buildings if backflow devices are to be installed in existing fire systems served by potable water	Bob Castle	Yes Legislative Committee Co-Chair	Yes
Plumbing Code Issues	Cross connection requirements	Bob Castle	Yes Legislative Committee Co-Chair	Yes
Plumbing Code Issues	Disruptive shutdowns for pressure testing should be eliminated if other on-site safeguard criteria are met	Bob Castle/Richard Harris/Bob Whitley	Yes Legis Comm/Yes Lobbyist/Yes	Yes/No/Yes

Plumbing Code Issues	Overly restrictive spacing requirements in commercial buildings	Richard Harris	Yes Lobbyist	No
Plumbing Code Issues	Plumbing Code conflicts with the latest definitions of tertiary recycled water in Title 22 of the Water Code	Bob Whitley	Yes President	Yes
Plumbing Code Issues	Appendix J conflicts with Section 13553 of the Water Code due to legislation AB 1522 that expanded the types of structures where recycled water may be used for flushing	Bob Whitley	Yes President	Yes
Plumbing Code Issues	IAPMO Appendix J was never adopted into the California Plumbing Code	Bob Whitley	Yes President	Yes
Plumbing Code Issues	Recommended improvement to the Plumbing Code will also require corresponding changes to Titles 17 and 22	Bob Whitley	Yes President	Yes
Plumbing Code Issues	Include professionals knowledgeable in the domain to assist in the development of regulations	Bob Whitley	Yes President	Yes
Promote On-Site Systems to Accomplish Reuse Efficiency	Coordinate with AB 885 on-site wastewater treatment	Mark Capron	Yes	No
Promote On-Site Systems to Accomplish Reuse Efficiency	Satellite wastewater treatment plants technology for intercepting part of wastewater and treat it upstream where recycling is most needed	Mark Capron/Andy Sienkiewich	Yes/Yes	No/No
Promote On-Site Systems to Accomplish Reuse Efficiency	Prohibition against on-site water recycling should be deleted	Bob Whitley	Yes President	Yes

*Sources: List of Issues for Consideration, provided to 2002 Recycled Water Task Force, May 24, 2002
List of WateReuse members, http://www.watereuse.org

[1] Suja Lowenthal, Central Basin Municipal Water District
[2]Ann Farrell, Central Costa County Sanitary District